

REMARKS

In view of the following remarks, reconsideration of the rejections and further examination are requested.

Initially, the Applicant wishes to thank the Examiner for conducting the telephone interview on October 31, 2007. During the interview, the applied prior art and arguments distinguishing the claims over the applied prior art were discussed.

Claim 5 is pending in this application.

Claim 5 has been rejected under 35 U.S.C. § 102(b) as being anticipated by Masahito (JP 2001-045599). Further, claim 5 has been rejected under 35 USC 103(a) as being unpatentable over Masahito in view of the Applicant's admitted prior art (APA). The Applicant respectfully traverses these rejections.

Claim 5 recites a method of manufacturing a speaker using a voice coil insertion jig including, in part, providing a voice coil insertion jig having an insertion part and a plurality of movable pieces that define an outside diameter that is larger than an outside diameter of the insertion part and a central boss provided above a center of an upper surface of a base that is separate from the movable pieces, deforming the plurality of movable pieces elastically toward the central boss, and inserting the voice coil insertion jig into a voice coil, and causing the plurality of moving pieces to elastically contact with and hold the voice coil with the voice coil insertion jig.

Masahito discloses a voice coil holder 19 (shown in Figures 2a, 2b, 4a and 4b) for a voice coil bobbin 16 that is structured to be elastically displaced inward. More specifically, the voice coil holder 19 includes an insertion part 32 and a segmented base 39 that is divided into three segments by gaps 38. Each of the segments of the base 39 is coupled to a boss comprised of members 36 and 37. The insertion part 32 has a lower portion that has a constant diameter and that extends from a terminus of the gaps 38 at 112 to a bottom 31 of the voice coil holder 19. Moreover, the insertion part 32 includes an upper portion having a variable diameter that comprises movable members that each correspond to a segment of the base 39, and that each extend from a bottom of base 39 to the terminus of the gaps 38 at 112.

During operation of the voice coil holder 19, the movable members are elastically displaced such that they together necessarily define a diameter that is less than or equal to (see Figures 2a and 4b) the constant diameter of the lower portion of the insertion part 32, and such that each segment of the base 39 and the corresponding bosses, comprised of the members 36 and 37, also move. The voice coil holder is then inserted into the voice coil bobbin 16. Further, to separate the voice coil holder 19 from the voice coil bobbin 16, the movable members are again elastically displaced and the voice coil holder 19 is extracted from the voice coil bobbin 16.

In contrast to the present invention, Masahito does not disclose: the movable members of the upper portion of the insertion part 32 having an outside diameter larger than an outside diameter of the constant diameter of the lower portion of the insertion part 32; the bosses, comprising the members 36 and 37, being separate from their respective segmented bases 39 and the movable members; and that the segments of the base 39 elastically contact with and hold the voice coil bobbin 16. Instead, Masahito discloses an upper portion of insertion part 32 that has a variable diameter and comprises movable members that together define a diameter that is less than or equal to the constant diameter of the lower portion of the insertion part 32, and that each segment of the base 39 and corresponding bosses, comprised of the members 36 and 37, also move.

The movable members of insertion part 32 appear to elastically contact and hold the voice coil bobbin 16 (as shown in Figures 4a and 4b of Masahito). The segments of the base 39 define an outside diameter larger than the outside diameter of insertion part 32, but the segments of base 39 do not also elastically contact with and hold the voice coil bobbin 16. The Examiner asserts that the segments of the base 39 define an outside diameter that is larger than an outside diameter of the insertion part 32. However, as discussed above, the segments of base 39 do not also elastically contact with and hold the voice coil bobbin 16.

Moreover, there is no disclosure or suggestion to modify Masahito such that: the segments of the base 39 elastically contact with and hold the voice coil bobbin 16; the segments of the base 39 are separate from their corresponding movable members of the upper portion of the insertion part 32; and the upper portion of the insertion part 32 has an outer diameter larger than the outside diameter of the lower portion of the insertion part 32. In other words, Masahito

does not disclose or suggest providing a voice coil insertion jig having an insertion part and a plurality of movable pieces that define an outside diameter that is larger than an outside diameter of the insertion part, and a central boss provided above a center of an upper surface of a base that is separate from the movable pieces, deforming the plurality of movable pieces elastically toward the central boss, and inserting the voice coil insertion jig into a voice coil, and causing the plurality of moving pieces to elastically contact with and hold the voice coil with the voice coil insertion jig.

For the above reasons, it is believed clear that Masahito fails to disclose or suggest the present invention as recited in claim 5.

Regarding APA, it is relied upon in the rejection as disclosing inserting the voice coil insertion jig into a magnetic gap forming a magnetic circuit of the speaker. However, it is clear that APA also fails to disclose or suggest the above disclosed features of the method of manufacturing a speaker using a voice coil insertion jig as recited in claim 5. Therefore, APA fails to address the deficiencies of Masahito. As a result, claim 5 is patentable over the combination of Masahito and APA.

Regarding withdrawn claim 6, it is noted that claim 6 is dependent from claim 5. Therefore, because claim 5 is allowable, claim 6 is entitled to due consideration.

Because of the above-mentioned distinctions, it is believed clear that claims 5 and 6 are patentable over the references relied upon in the rejections. Furthermore, it is submitted that the distinctions are such that a person having ordinary skill in the art at the time of invention would not have been motivated to make any combination of the references of record in such a manner, as to result in, or otherwise render obvious, the present invention as recited in claims 5 and 6.

In view of the foregoing remarks, all of the claims now pending in this application are believe to be condition for allowance. Reconsideration and favorable action is respectfully solicited.

Should the Examiner believe there are any remaining issues which must be resolved before this application can be passed to issue, it is respectfully requested that the Examiner contact the undersigned by telephone in order to resolve such issues.

Respectfully submitted,

Kiyoshi YAMAGISHI

By: 

Kevin McDermott

Registration No. 48,113

Attorney for Applicant

KM/lq
WENDEROTH, LIND & PONACK, L.L.P.
Washington, D.C. 20006-1021
Telephone (202) 721-8200
Facsimile (202) 721-8250
November 16, 2007